

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A gateway for connecting networks of different types, for connecting a first network and a second network which uses a signal format different from that of the first network, said gateway comprising:

a conversion section which converts a signal used in the first network to a signal to be used in the second network, and a signal used in the second network to a signal to be used in the first network, when communication is performed between a terminal connected to the first network and a terminal connected to the second network;

a detection section which detects conversion-process information containing at least one of the time said conversion section spent to convert the signal and the amount of data converted; and

a network-connecting section which is connected to at least one of the first and second networks and which transmits the conversion-process information to a fee-charging system of the first network or a fee-charging system of the second network.

2. (Original) The gateway according to claim 1,

wherein said conversion section converts at least one of a call-control signal generated by call-connection signaling, an audio signal generated by an audio CODEC and a video signal generated by a video CODEC.

3. (Original) The gateway according to claim 2,

wherein said conversion section comprises

a signaling gateway unit which converts the call-control signal and

a media gateway unit which converts the audio signal and the video signal,

wherein said detecting section detects the conversion-process information used in a conversion process in the media gateway unit.

4. (Currently Amended) The gateway according to claim 2 ~~or 3~~,

wherein the conversion of the call-control signal is conversion between a Q.931 signal and an SIP signal,

the conversion of the audio signal is conversion between an AMR bit stream and a G.723.1 signal, and

the conversion of the video signal is conversion between an MPEG4 bit stream and an H.263 signal.

5. (Original) A system for charging fees for communication between networks of different types, said system comprising:

a first terminal which performs a call control;

a second terminal which responds to the call control performed by the first terminal;

a first network to which the first terminal is connected;

a second network to which the second terminal is connected; and

a gateway which connects the first network and the second network,

wherein:

the first network and the second network use different signal formats;

the first network comprises a fee-charging system;

the gateway converts a signal from the first network to a suitable signal for the signal format of the second network and transmits the signal to the second network, converts a signal from the second network to a suitable signal for the signal format of the first network and transmits the signal to the first network, detects conversion-process information containing at least one of the time spent to convert the signal and the amount of data converted, and transmits the conversion-process information to the fee-charging system, in order to accomplish communication between the first terminal and the second terminal; and

the fee-charging system performs a fee-charging process in accordance with the conversion-process information, to charge a fee on a user of the first terminal.

6. (Original) The system according to claim 5,

wherein the gateway detects the conversion-process information after the first terminal and the second terminal have been connected to each other.

7. (Original) The system according to claim 5,

wherein the gateway detects the conversion-process information about at least one of a signal generated by an audio CODEC and a signal generated by a video CODEC.

8. (Original) A method of charging fees for communication between networks of different types, comprising the steps of:

connecting a first network and a second network using a signal format different from that of the first network, by means of a gateway which converts a communication signal from a first terminal connected to the first network, to a suitable signal for the signal format of the second network and converts a communication signal from a second terminal connected to the second network, to a suitable signal for the signal format of the first network;

detecting conversion-process information containing at least one of the time spent to convert a signal and the amount of data converted, said signal having been transmitted after the first terminal and the second terminal have been connected to each other, by the gateway;

transmitting the conversion-process information to a fee-charging system of the network to which the first or second terminal that is a calling side is connected, by the gateway; and

charging a fee on a user of the calling-side terminal, said fee being fixed or calculated on the basis of communication time, based on the conversion-process information, by the fee-charging system.

9. (Original) The method according to claim 8,
wherein the conversion-process information includes at least one of the time spent to convert signals in an audio CODEC and video CODEC and the amount of data converted therein.

This listing of claims will replace all prior versions, and listings, of claims in the application:

10. (New) The gateway according to claim 3,
wherein the conversion of the call-control signal is conversion between a Q.931 signal and an SIP signal,

the conversion of the audio signal is conversion between an AMR bit stream and a G.723.1 signal, and

the conversion of the video signal is conversion between an MPEG4 bit stream and an H.263 signal.